

8. The method of claim **1**, further comprising contacting the biofilm with an antimicrobial agent or a deoxyribonuclease (DNase).

9. A method to inhibit or disrupt a biofilm or treat a disease or condition incident to a biofilm infection in a subject in need thereof, comprising administering to the subject an effective amount of an agent that cleaves the Holliday junction (HJ) structure in the biofilm.

10. The method of claim **9**, wherein the administration is local or systemic.

11. The method of claim **9**, wherein the agent is an HJ-specific endonuclease.

12. The method of claim **11**, wherein the HJ-specific endonuclease is a RuvABC polypeptide or a RusA polypeptide or both.

13. The method of claim **12**, wherein the RusA polypeptide comprises the polypeptide MVNTYSITLPWPPSNN-RYYRHNRRGRTHVSAGQQAYRDNVARIKNAML-DIGLAMPVKI RIECHMPDRRRRDLNLQKAADFALTKAGFWLD-DAQVVDYRVVKMPVTKGGRLLELT TEMGNEA (SEQ ID NO: 1), or an equivalent thereof.

14. The method of claim **12**, wherein the RuvABC polypeptide comprises the polypeptides MIGRLRG-IBEKQPPLVLIEVGGVGYEVHMPMTCFYELP EAGQEAIVFTHFVVREDAQLL YGFNNKQERTLFKE-LIKTNGVGPKLALAILSGMSAQQQVNAVER-EEVGVALKLPGIGKK TAERLIVEMKDRFKGLHGD LFTPAADLVLTSPASPATDDAEQEAVAALVAL-GYKPQEAS RMVSKIARPDASSETLIREALRAAL (SEQ ID NO: 4); MIEADRLLISAGTTLPEDVADRAIR-PKLLEEVGQPQVRSQMEIFIKAAKLRGDALDHLLIF GPPGLGKTTLANIVANEMGVNLRTTSGPVLEKAGD-LAAMLTNLEPHDVLFIDEIHLRSP VVEEVLYPAMED-YQLDIMIGEGPAARSIKIDLPPFTLIGATTRAGSLT-SPLRDRFGIVQRLLFYQVPDLQYIVSRSAFMGLEMSDDGAL-EVARARRGTPRIANRLLRRVRDAEVKHD GTISADI-AAQALDMLNVDAEGFDYMDRKLL-LAVIDKFFGGPVGLDNAAAIGERETIE DVLEPYLIQQGFLQRTPRGRMAT-

TRAWNHFGITPPPEMPA (SEQ ID NO: 2); and MASAIILGIDPGSRVTGYGVIRQVGRQLSYLGSG-CIRTKVDDLPSRLKLIYAGVTEITQFQ PDYFAIEQVF-MAKNADSALKLGQARGVAIAAVNQELPVFEYAAR-QVKQTVVGIGSAE KSQVQHMVRRTLKL PANPQADAADALA-IAITHCHVSQNAMQMSESRLNLARGRLRA, (SEQ ID NO: 3) or an equivalent of each thereof, wherein an equivalent contains the mutated amino acids as shown in the bold font.

15. The method of claim **9**, further comprising administering an effective amount of an antimicrobial agent to the subject.

16-17. (canceled)

18. The method of claim **9**, wherein the disease or condition is an infection caused by one or more of: *Enterococcus faecium*, *Staphylococcus aureus*, *Klebsiella pneumoniae*, *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, *Enterobacter* species, uropathogenic *Escherichia coli* (UPEC), nontypeable *Haemophilus influenzae* (NTHI), *S. epidermidis*, *Streptococcus agalactiae*, *Neisseria meningitidis*, *Treponemes*, *denticola*, *pallidum*, *Burkholderia cepacia*, *Burkholderia pseudomallei*, *Moraxella catarrhalis*, *Streptococcus pneumoniae*, *Streptococcus pyogenes*, *Pseudomonas aeruginosa*, or *Mycobacterium tuberculosis*; an infection in upper, mid and lower airway, otitis, sinusitis, bronchitis, exacerbations of chronic obstructive pulmonary disease (COPD), chronic cough, complications of or primary cause of cystic fibrosis (CF) or community acquired pneumonia (CAP).

19. The method of claim **9**, further comprising contacting the biofilm with an antimicrobial agent or a deoxyribonuclease (DNase).

20. The method of claim **9**, wherein the disease is cystic fibrosis and the administration is by inhalation.

21. The method of claim **20**, further comprising contacting the biofilm with an antimicrobial agent or DNase.

22. A kit comprising an agent that cleaves the Holliday junction (HJ) structure in a biofilm and instructions for use in the method of claim **9**.

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